

AMENDMENTS TO THE DRAWINGS WITHOUT MARKINGS

IN THE DRAWING:

Fig. 2 has been amended.

Fig. 5 has been added.

REMARKS

The last Office Action of November 17, 2004 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-13 are pending in the application. Claims 2-4, 6, and 7 have been canceled. Claims 1, 5, 9, and 12 have been amended. Claims 1, 5, 8, and 9-13 remain in this application. Amendments to the specification have been made. No fee is due.

It is noted that the drawings are objected to because of applicant's failure to show every feature set forth in the claims. Drawing proposals showing the required changes are submitted herewith together with a communication to the draftsman. A new Fig. 2 is submitted and labeled "Replacement Sheet", and a new Fig. 5 has been added and labeled "New Sheet".

The Examiner's rejection under 35 U.S.C. §112, second paragraph is confusing because no reference to any claims is set forth. Clarification is requested to enable applicant to properly respond to this ground for rejection

Claims 1-8 and 11-13 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. 2002/0046397 to Schmitt et al. (hereinafter "Schmitt")

Claims 9 and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schmitt.

The objection of claim 4 under 37 CFR 1.75(c) has become moot by canceling the claim.

DRAWING OBJECTIONS UNDER 37 C.F.R. 1.83(a)

The objection regarding claim 9, that the configuration instructions for combining several steps at least to a higher-level step are not shown in the drawings, is hereby traversed. As stated in the specification in Para. [0030] and described therein with reference to FIG. 2: “The instructions 2b, 2c, 2d in the illustrated embodiment do not contain a key term and are located between the two key terms CYC90 and CYC70. Accordingly, these instructions are combined by the syntax analyzer 7 to a step 6b designated as “free DIN code”, and the associated symbol 4b is generated. Both the identifier and the symbol are defined in the configuration file 8.” (emphasis added). A similar description is given in Para. [0031] with reference to FIG. 1. Step 6b is to be understood as a higher level step, and the method of the invention generates from the parts program 1 a structured step representation 5 that can be easily understood by a user and visualized with the editor 9. (see Para. [0031]).

FIG. 2 has been amended to show the definition file, association parameters and configuration files specified in the claims 10-11. As stated in Para. [0017], the parts program includes a definition file for causing the editor to highlight defined instructions and/or key terms. As stated in Para. [0041], association parameters can be used to combine several steps associated with each key term in the configuration file 8 to a higher-level step or plane.

Regarding claim 12, Para. [0037] describes: “For example, special instructions, so-called configuration instructions, that are not already present in

the parts program (1) can be written later to the parts program. Such configuration instruction contains in addition to the actual key term information (information in boxes 3a, ..., 3d of FIG. 1) about the designation of the steps (6a, ..., 6d) generated by the syntax analyzer (7) from the key term (3a, ..., 3d), and optionally a definition of the associated symbol (4a, ..., 4d in FIG. 3) as well as a definition of the desired hierarchical plane. The step designations (6a, ..., 6d), symbols (4a, ..., 4d) and planes can then be directly stored in the parts program independent of the configuration file (8)."

A new FIG. 5 is submitted herewith which shows in more detail the hierarchical plane recited in claims 9-11. The term "hierarchical plane" is used to describe the higher level in which the several steps are combined. The reference symbols correspond to the symbols shown in FIG. 1. No new matter is introduced with FIG. 5. Applicant respectfully requests that the examiner approves new FIG. 5 and the corresponding amendment in the specification.

All features listed in the drawing objections and recited in claims 9-12 are now clearly shown in the drawings. No new matter is introduced. Withdrawal of this objection is therefore requested.

REJECTION UNDER 35 U.S.C. §102(b)

Applicant has been amended claim 1 to include subject matter from claims 3, 6 and 7, which have been canceled, and further recites that at least two different parts programs are displayed simultaneously side-by-side as a step

representation, whereby steps that indicate a synchronization between the two parts programs are displayed in a common row.

The Schmitt reference is directed to a method for debugging flowchart based computer programs for industrial controllers. The Office Action asserts with respect to claim 6 that Schmitt's editor simultaneously visualizes at least two parts programs as a step representation of task-oriented steps, citing in particular FIG. 6 and Para. [0045] and [0084] – [0086]. As shown in FIG. 4 of the instant application and described in detail in [0034] - [0035], the at least two parts programs are different parts programs, as now clearly recited in amended claim 1. Conversely, the Schmitt reference debugs a single program on a flowchart level, with FIG. 6 of Schmitt specifically describing "branching instructions" of the same program.

The present invention represents the steps of the two or more different parts programs in synchronized form, providing a very comprehensible representation of the individual steps and the production process. By visualizing two different parts programs in step representation next to each other, as well as by displaying special steps that indicate a synchronization between the two parts programs in the same row, the entire production process as well as the processing of the individual parts programs and the synchronization between the different parts programs can be particularly easily analyzed and monitored.

Moreover, the configuration file is configurable, which allows key terms to be flexibly selected and adapted to a particular manufacturer of a machine and/or the machine itself. This is particularly advantageous since the programming

language used by the machine manufacturers and based on standard ASCII-source code according to DIN 66025/ISO is frequently updated. (see Para. [0009] of the instant specification).

The cited reference also does not disclose a configurable configuration file which is read by the syntax analyzer, nor key terms and their association with the respective steps.

Withdrawal of all rejections under 35 U.S.C. §102(b) and §103(a) and allowance of claims 1, 5, 8, 9, 12 and 13 are thus respectfully requested.

CITED REFERENCES

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the newly submitted claims. It is thus felt that no specific discussion thereof is necessary.

CONCLUSION

In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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